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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,192	01/21/2004	Kia Silverbrook	RRA17US	2063
24011	7590	08/08/2007		
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			EXAMINER GOLDBERG, BRIAN J	
			ART UNIT 2861	PAPER NUMBER
			MAIL DATE 08/08/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/760,192	Applicant(s) SILVERBROOK, KIA	
	Examiner Brian Goldberg	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: rotor element sensor 156 is not shown in figure 20, as stated in the specification, and element 156 cannot be found in any of the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. (US 6439908) in view of Axtell et al. (US 6493937).

4. Regarding claim 1, Silverbrook et al. disclose “a plurality of ink storage reservoirs (16 of Fig 2); an ink delivery member (32 of Fig 7) defining a plurality of ink delivery channels (80 of Fig 7); and a pagewidth printhead (18 of Fig 7) in fluid communication with the plurality of ink storage reservoirs (16 of Fig 7) by means of the one or more printing fluid delivery channels (80 of Fig 7); power and data contacts (22, 54, 66 of Fig 4) for electrical connection with complementary power and data contacts on said cradle when said cartridge is received in said cradle (col 3 ln 57-63, col 4 ln 12-18)...said cradle comprising complementary power and data contacts (56 of Fig 3).” Thus Silverbrook et al. meet the claimed invention except the cartridge comprising “printhead maintenance means for maintaining proper printhead functioning; and said cradle comprising...drive means for driving said printhead maintenance means.”

5. Axtell et al. teach the cartridge comprising “printhead maintenance means for maintaining proper printhead functioning (see spittoon, cap, and wiper on consumable cartridge 401 of Fig 7); and said cradle comprising...drive means for driving said printhead maintenance means (col 21 ln 64 – col 22 ln 6).” It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a maintenance means and maintenance driving means. One would have been motivated to so modify Silverbrook et al. to achieve the predictable results of performing regular maintenance on the printhead in order to prolong its usable life and the life of its parts and maintain the desired quality of printing.

6. Regarding claim 2, Silverbrook et al. disclose “an elongate body housing the plurality of ink storage reservoirs (casing 14 or casing of 32, see Fig 2 and 3).”

7. Regarding claim 3, Silverbrook et al. disclose "the pagewidth printhead (18 of Fig 2) is attached to the elongate body (14 of Fig 2)."

8. Regarding claim 5, Silverbrook et al. disclose "the pagewidth printhead (18 of Fig 5) is attached to the elongate body (14 of Fig 5) by means of the ink delivery member (32 of Fig 5)."

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Axtell et al. and further in view of Silverbrook (US 6318849).

10. Regarding claim 4, Silverbrook et al. in view of Axtell et al. disclose the claimed invention as set forth above regarding claim 3 and Silverbrook et al. also disclose the ink delivery member (32 of Fig 7) extends the length of the printhead, while also stating that molding 28 is formed of an injection molded plastic body which is the same as what is stated in the instant application. A liquid crystal polymer is a type of plastic as disclosed in the instant application in paragraph [0062], lines 1-3. It would therefore be obvious to use the same material for the ink delivery member 32.

11. Furthermore, Silverbrook teaches the ink delivery member (14 of Fig 1) is formed from injection molded plastic which is the same as what is stated in the instant application. A liquid crystal polymer is a type of plastic as disclosed in the instant application in paragraph [0062], lines 1-3. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the ink delivery member be formed from liquid crystal polymer. One would have been motivated to so modify Silverbrook et al. in view of Axtell et al. to achieve the predictable results of using a material that provides outstanding mechanical properties at high temperatures,

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excellent chemical resistance, inherent flame retardancy and good weatherability, while also having the ability to be melt processed on conventional equipment at fast speeds with excellent replication of mold details.

### ***Response to Arguments***

12. Applicant's arguments, see page 2, filed 7/18/07, with respect to the rejection(s) of claim(s) 1 under 35 U.S.C. 103 have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the clarification of the claim and newly found prior art.

13. As examiner now understands it, applicant's invention includes rotor element 60, which serves as a printhead maintenance means located on the replaceable printer cartridge, and that is driven by rotor element drive roller 94 by way of the motor 110 located on the cradle. Similarly, the Axtell et al. reference cited above has a printhead maintenance means (see Fig 7 and 16) that is driven by a rotor gear by way of a motor located on the cradle, as cited above.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Silverbrook et al. (US 6942334) also discloses a printhead maintenance means located on the cartridge.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goldberg whose telephone number is 571-272-

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2728. The examiner can normally be reached on Monday through Friday, 9AM-5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on 571-272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian Goldberg   
AU 2861  
August 3, 2007

  
MATTHEW LUU  
SUPERVISORY PATENT EXAMINER